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FIG. 1

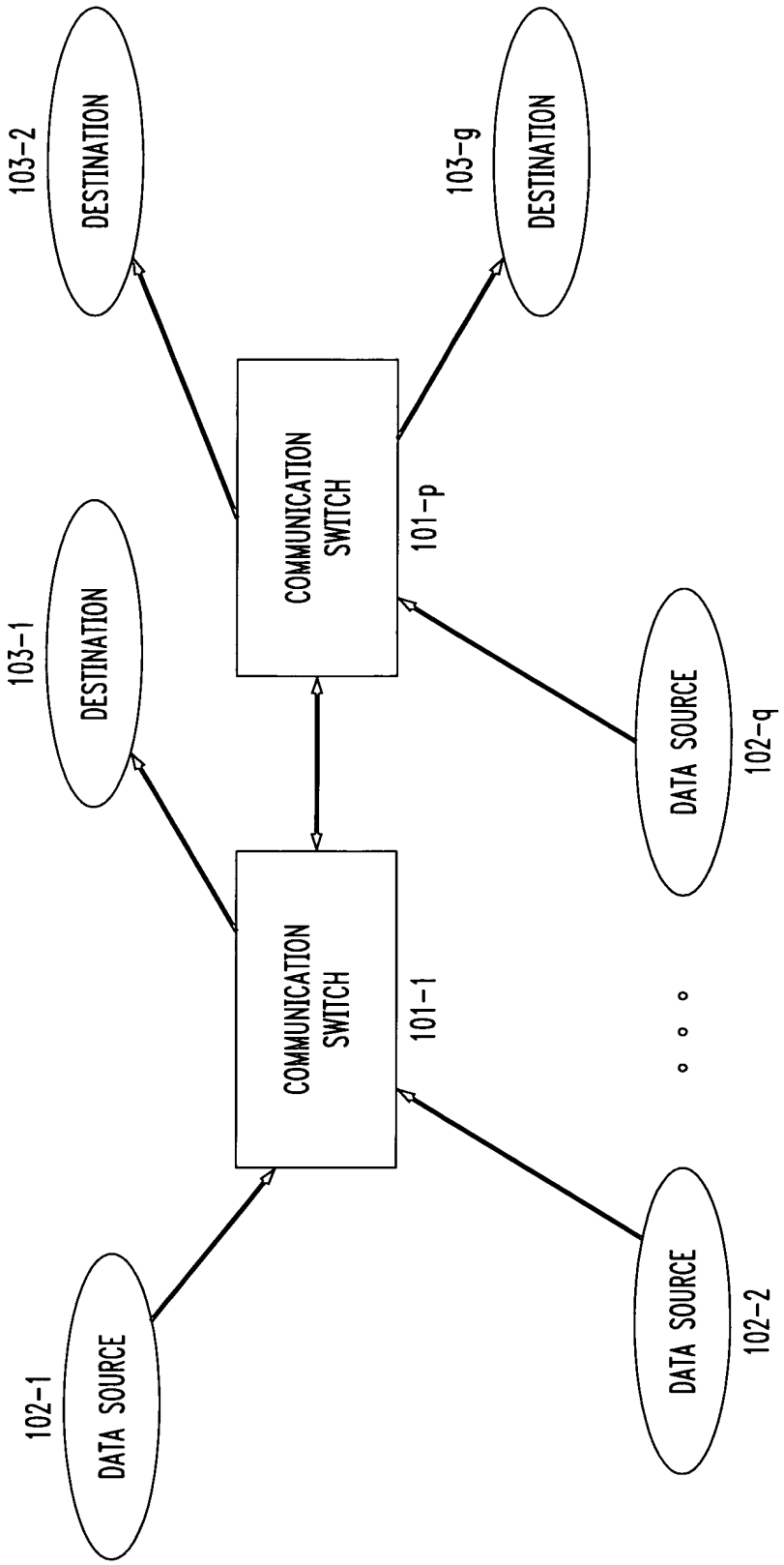

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FIG. 2

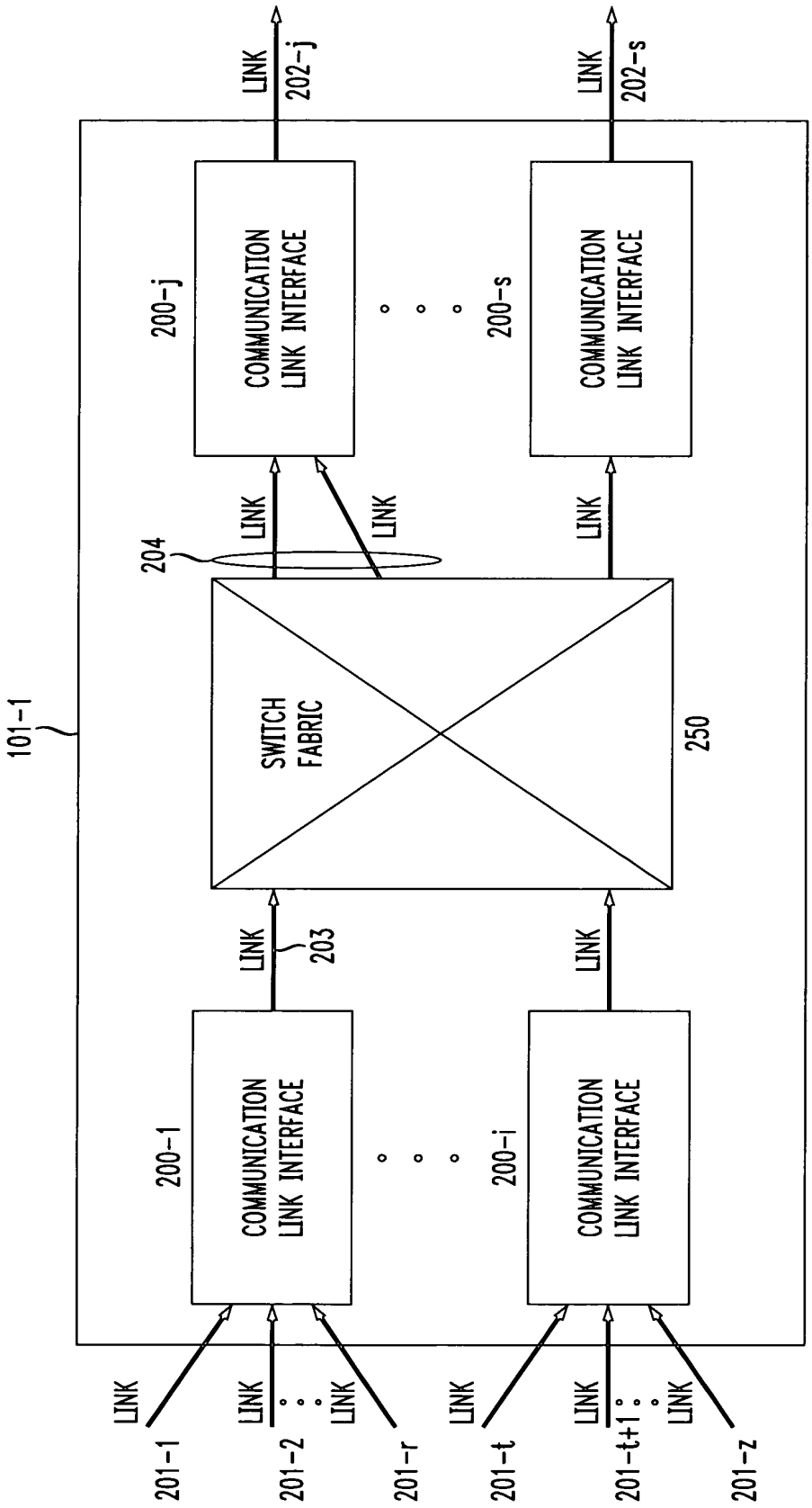

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FIG. 3A

```
1   if (flow i is newly backlogged)
2       F_i^k ← l_i^k / ρ_i
3       Append i to the tail of the linked list
4   else  /* A packet of i has just been transmitted */
5       F_i^k ← F_i^{k-1} + l_i^k / ρ_i
6       if (F_i^k ≥ T_Q)
7           F_i^k ← F_i^k − T_Q
8           Conclude visit to flow i
9       else
10          Keep servicing flow i
```

FIG. 3B

```
1       F_i^k ← F_i^{k-1} + l_i^k / ρ_i
2       if (F_i^k ≥ T_Q)
3           F_i^k ← F_i^k − T_Q
4           Conclude visit to flow i
5       else if (flow i is still backlogged)
6           Keep servicing flow i
```

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FIG. 4

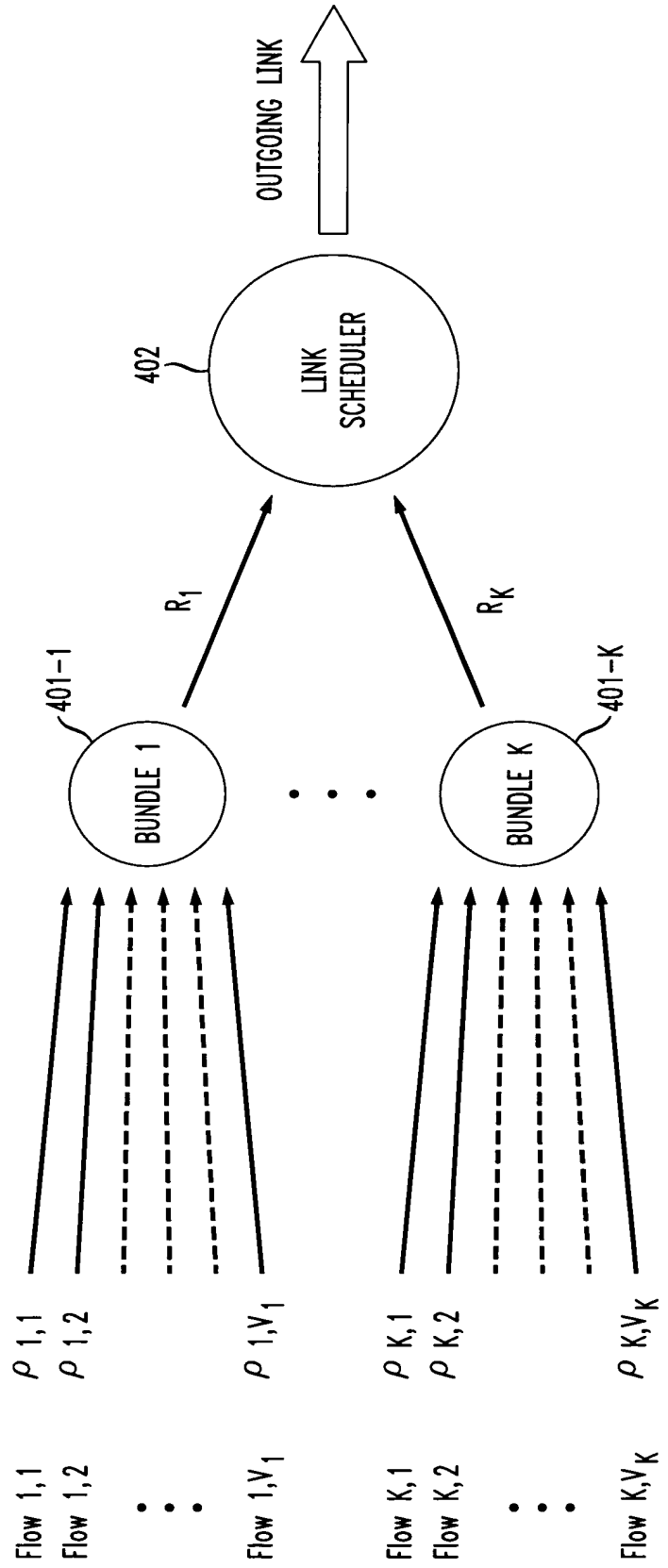

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FIG. 5

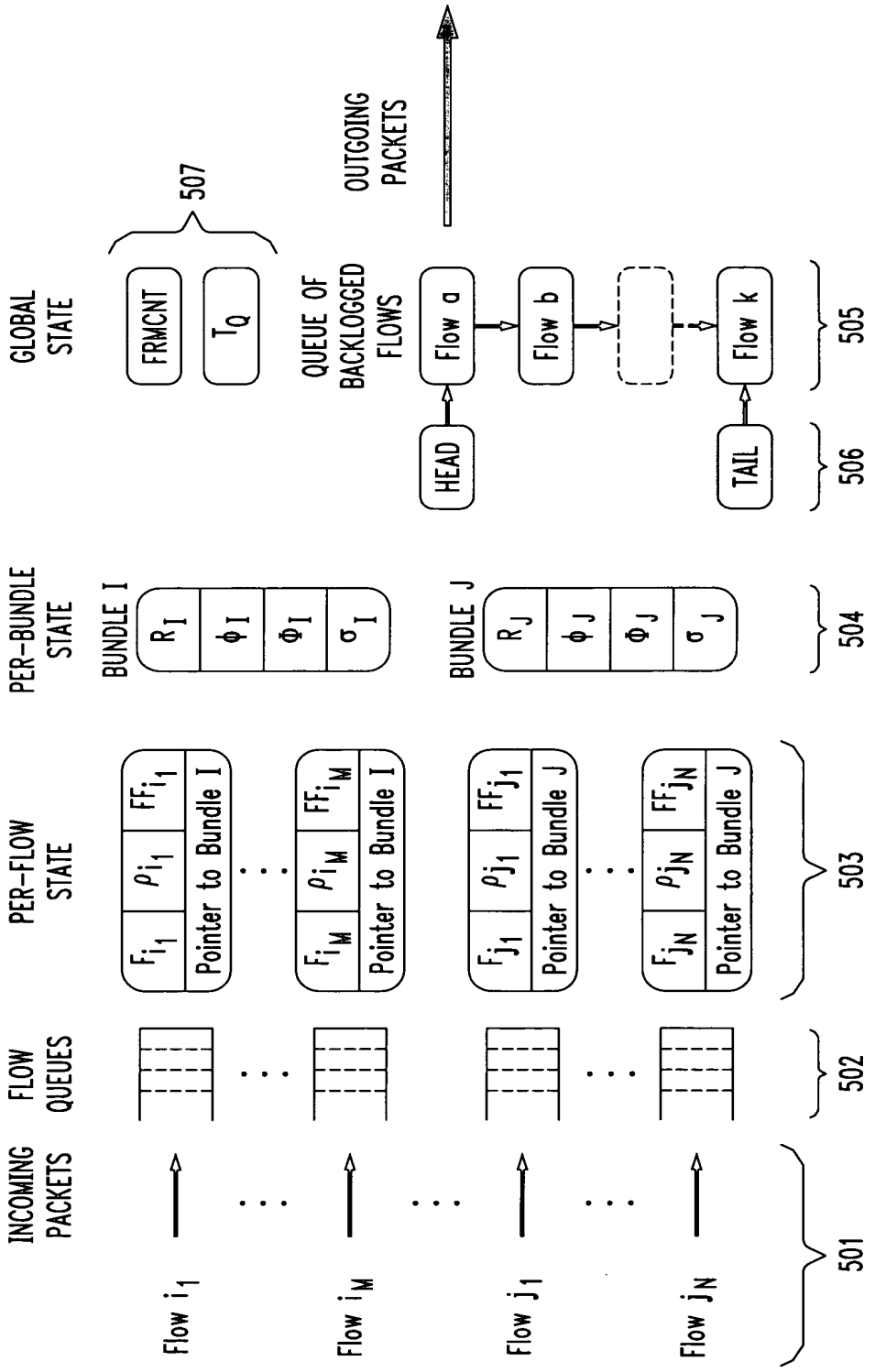

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FIG. 6

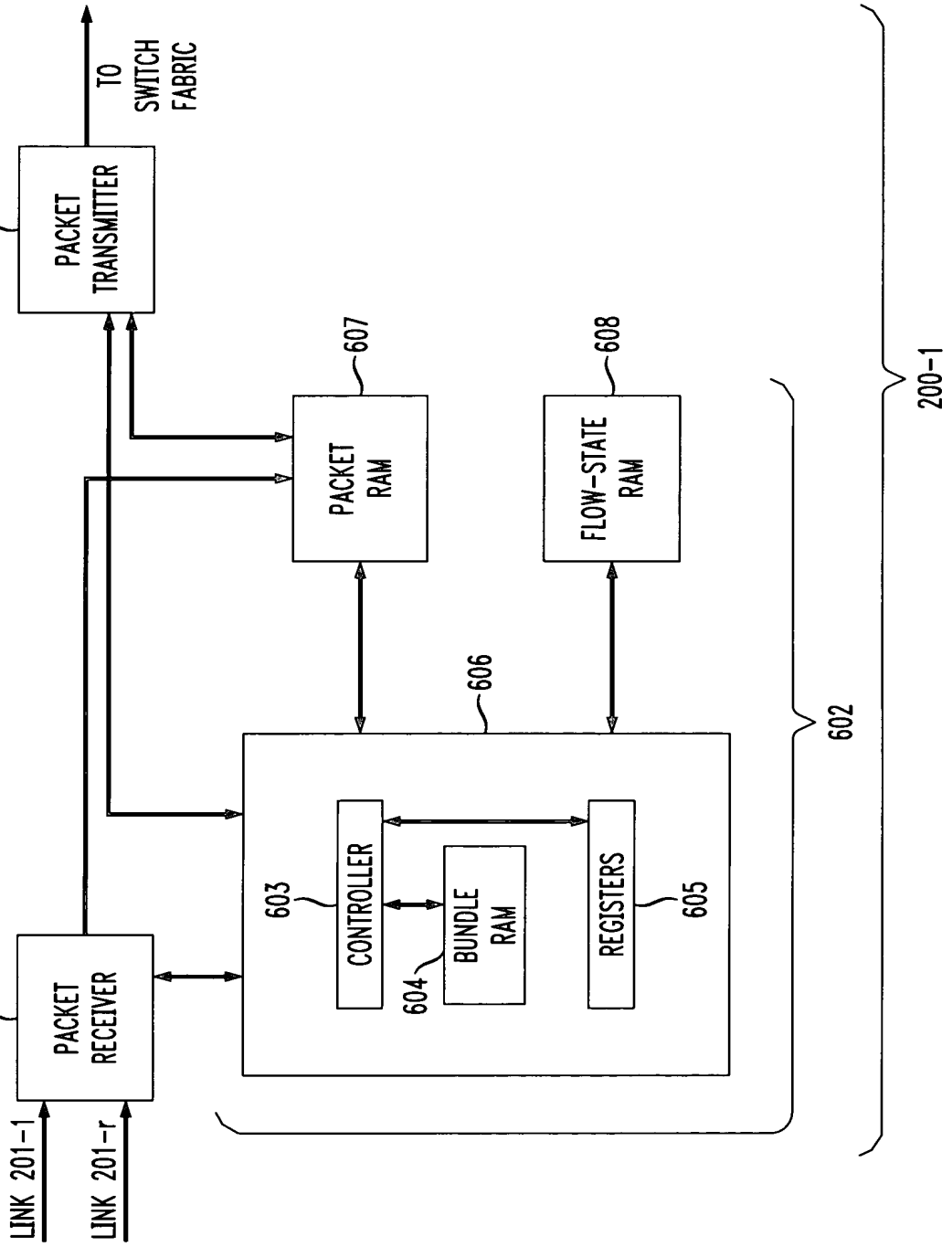

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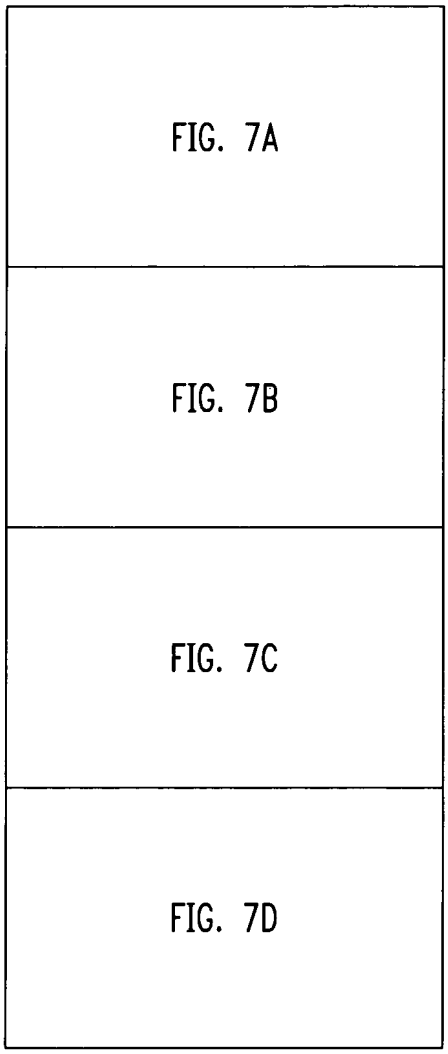
FIG. 7



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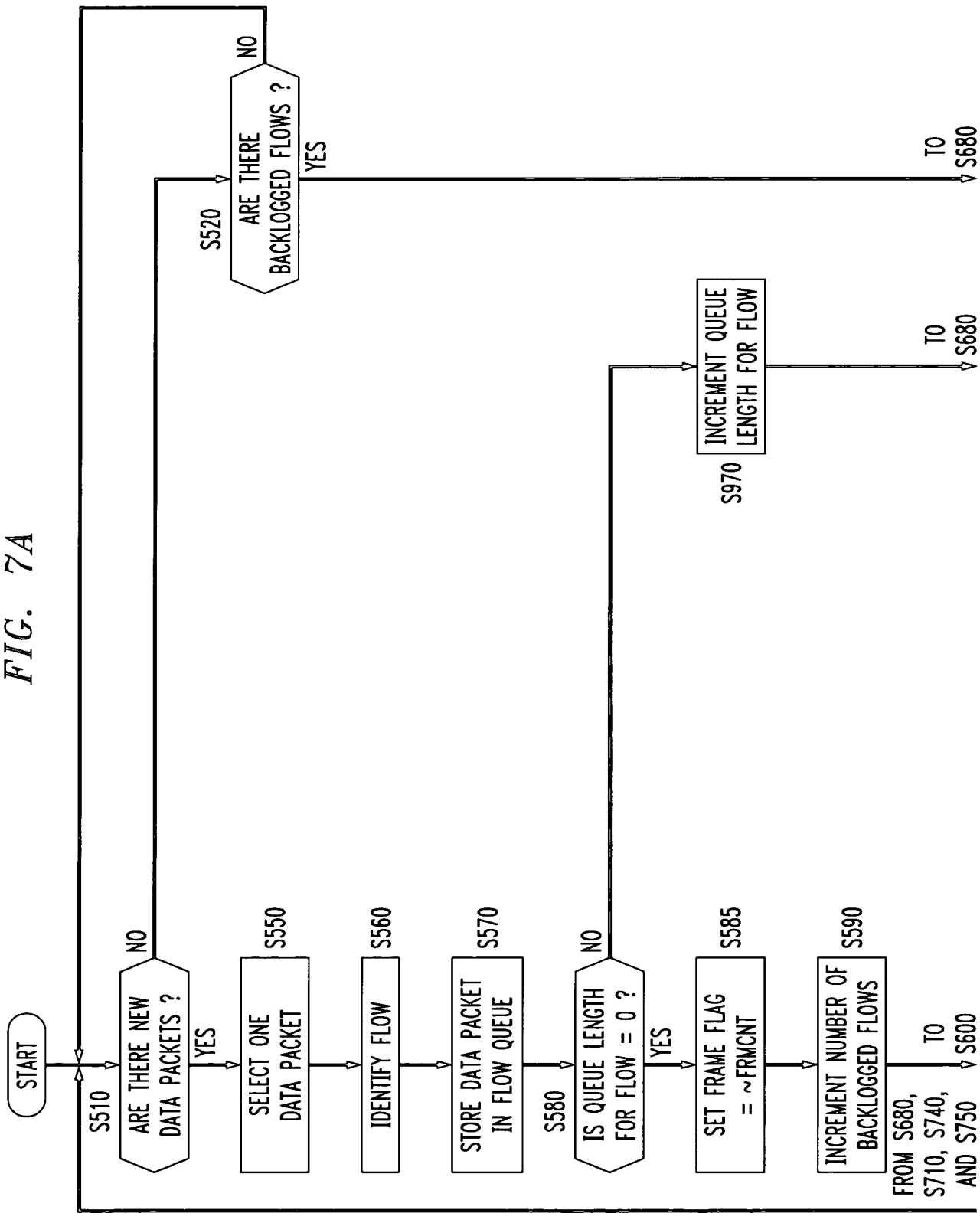

FIG. 7A

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Replacement Sheet

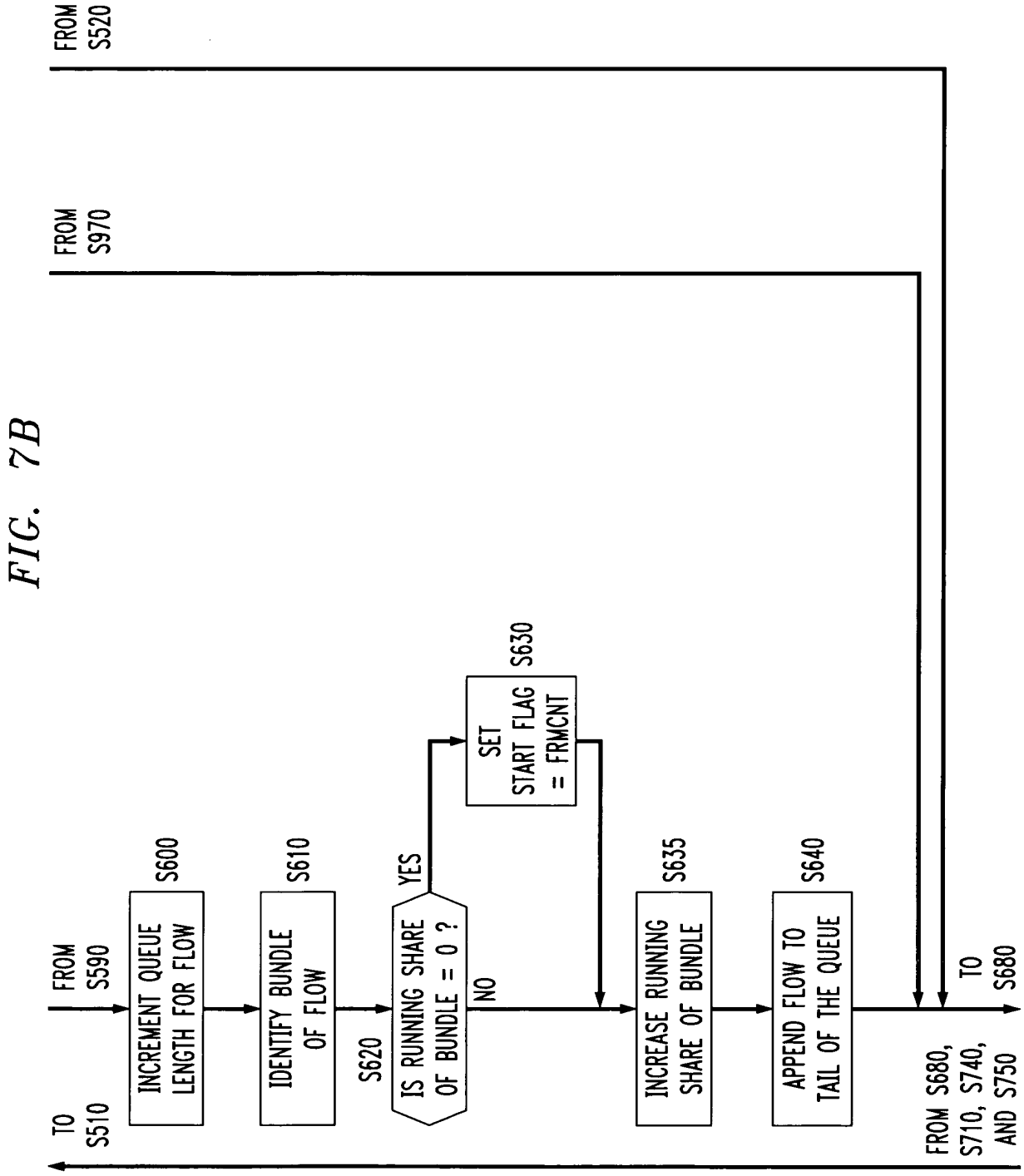

FIG. 7B

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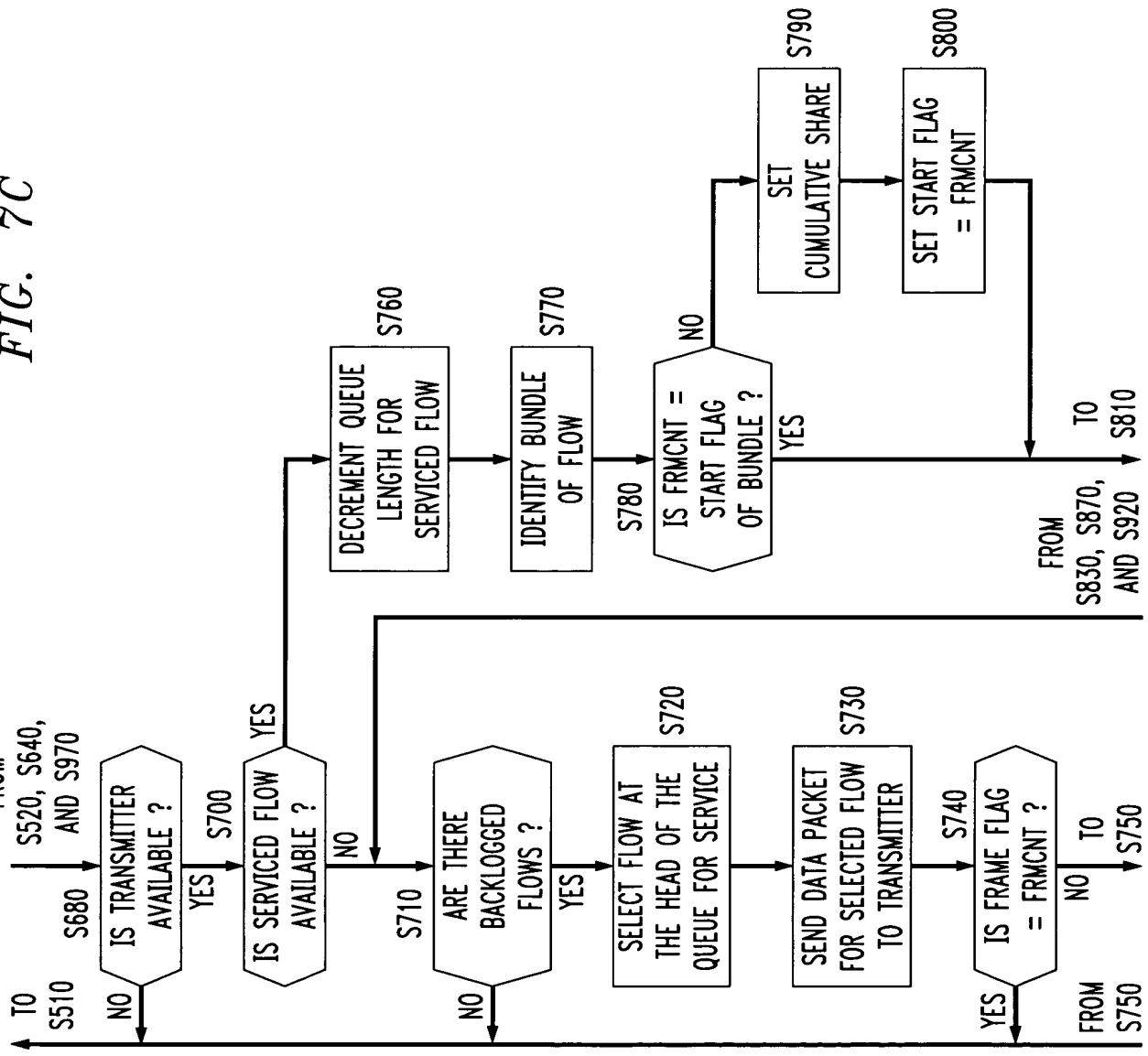
FIG. 7C



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Replacement Sheet

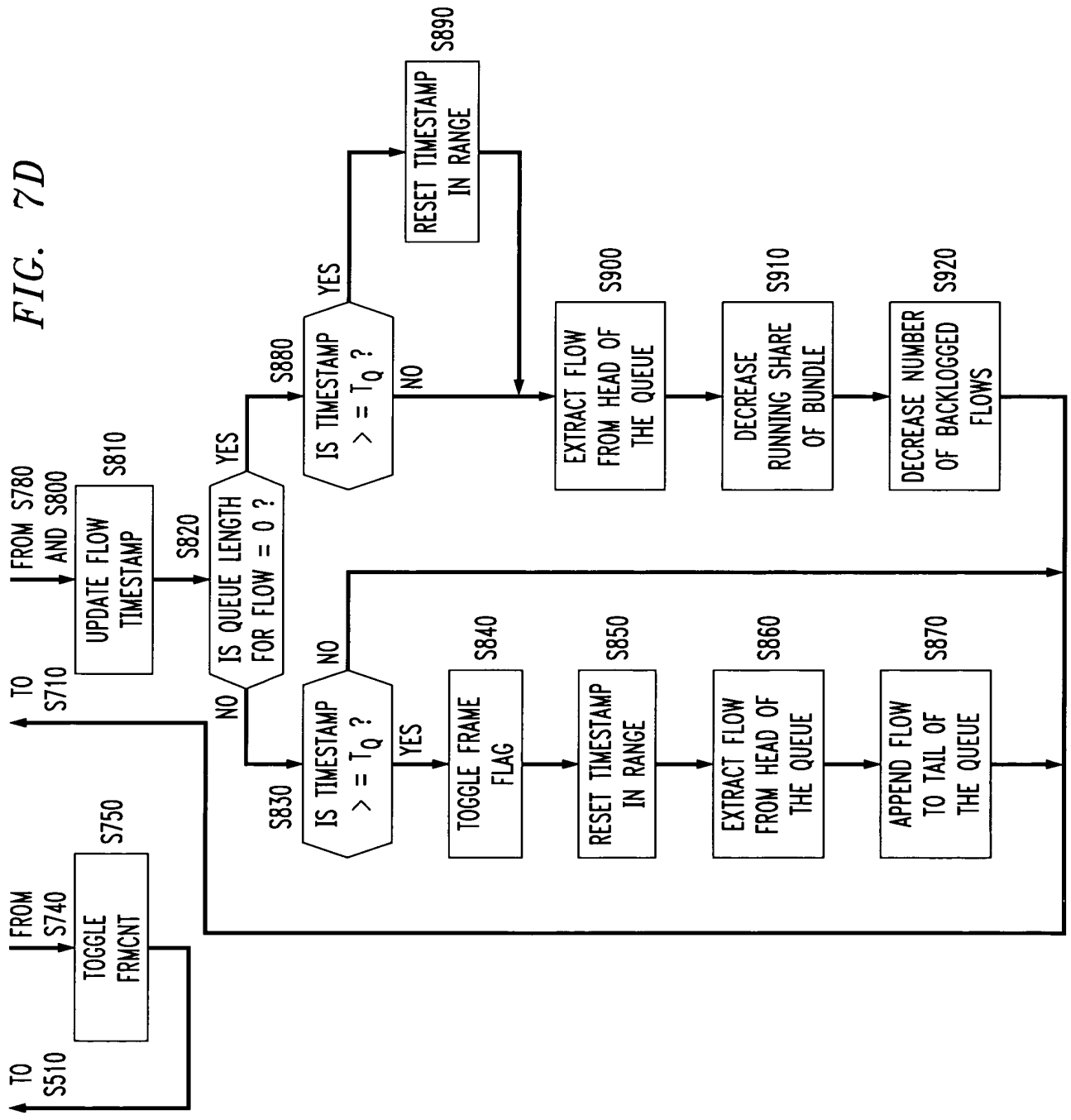

FIG. 7D

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Replacement sheet

FIG. 8

```
1   Identify flow i currently at the head of the linked list
2   Identify bundle I of flow i
3   if (FF_i ≠ FRMCNT)
4       FRMCNT ← ¬ FRMCNT
5   Prepare head-of-the-queue packet p_i^k for transmission
6   if (σ_I ≠ FRMCNT)
7       Φ_I ← φ_I
8   σ_I ← FRMCNT
9   F_i^k ← F_i^{k-1} + (l_i^k / R_I) · (Φ_I / ρ_i)
10  if (F_i^k ≥ T_Q) /* Frame over for flow i */
11      F_i^k ← F_i^k - T_Q
12      FF_i ← ¬ FRMCNT
13      Extract flow i from head of linked list
14      if (Flow i is still backlogged)
15          Append flow i to tail of linked list
16      else  /* Flow i is getting idle */
17          φ_I ← φ_I - ρ_i
18      else if (Flow i is getting idle)
19          Extract flow i from head of linked list
20          φ_I ← φ_I - ρ_i
```